



Young low-mass binary Oph 1622-2405

- Allers (2005), Allers et al. (2006a,b) Spitzer excess & resolved binary IR spectral types of M7.5/M8 masses of 50/60 M_{Jup} and age ~40 Myr
- Jayawardhana et al. (2006a,b) optical spectral types of M9/M9.5-L0 assumed member of Ophiuchus cloud (<1 Myr) masses of 14/7 M_{Jup}; "planetary mass" binary
- Close et al. (2006) IR spectral types of M9 and M9.5 masses of 17 and 14 M_{Jup} age ~ 5 Myr





















Summary

- Measure spectral types w/ optical spectra when possible
- For both optical and IR spectra, use young free-floating brown dwarfs (not dwarfs) as the standards
- Constrain ages by comparing gravity sensitive lines to those of low-mass objects with known ages
- Estimate spectral types, ages, masses with uniform methods for reliable comparison
- Estimate masses with methods and models that are tested against available observational constraints